

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A bus module for connecting an automation unit to a backplane bus ~~which can be used~~usable to transport at least one of data and/or power, ~~with said~~the bus module ~~having~~comprising:

_____at least one bus connecting device ~~(BL2)~~_____for connection to the backplane bus; and

_____at least one unit connecting device ~~(AL2, BA2, PC2, OE1)~~_____including a serial optical interface ~~(PC2, OE1)~~_____for connection to the automation unit, _____

~~characterized in that~~

_____the unit connecting device ~~(AL2, BA2, PC2, OE1)~~has including a coupling element, ~~(BA2) which can be used~~usable to set up a point-to-point communication link to the automation unit.

2. (Currently Amended) The bus module as claimed in claim 1, ~~in which~~wherein the coupling element ~~(BA2) has~~includes a bus ASIC.

3. (Currently Amended) The bus module as claimed in claim 1 ~~or 2, in which~~wherein the unit connecting device ~~(AL2, BA2, PC2, OE1) has~~includes a microcontroller ~~(PC2) which is~~ connected to the coupling element ~~(BA2)~~ and drives the serial optical interface ~~(PC2, OE1)~~.

4. (Currently Amended) The bus module as claimed in ~~one of the preceding claims~~claim 1, ~~in which~~wherein the serial

optical interface ~~(μ C2, OE1)~~ ~~comprises~~ includes a UART interface.

5. (Currently Amended) The bus module as claimed in claim 4, ~~in which~~ wherein the UART interface is integrated in the coupling element ~~(BA2)~~.

6. (Currently Amended) The bus module as claimed in ~~one of the preceding claims, in which~~ claim 1, wherein the optical interface ~~(μ C2, OE1)~~ enables at least one of half-duplex or and full-duplex operation.

7. (Currently Amended) A load feeder apparatus ~~which is for coupling intended to be coupled to a backplane bus, comprising: and has~~
_____ an interface (μ C3, OE2) ~~for to~~ communicating
communicate with a bus module (μ C2),
~~characterized in that~~
_____ the interface (μ C3, OE2) ~~is being~~ a serial optical interface.

8. (Currently Amended) The load feeder apparatus as claimed in claim 7, ~~which has~~ further comprising a microcontroller ~~(μ C3) that~~ to controls the serial optical interface.

9. (Currently Amended) The load feeder apparatus as claimed in claim 7 ~~or 8, in which~~ wherein the serial optical interface ~~(OE2, μ C3)~~ comprises includes a UART interface.

10. (Currently Amended) The load feeder apparatus as claimed in ~~one of claims 7 to 9, in which~~ wherein the optical interface ~~(OE2, μ C3)~~ enables at least one of half-duplex or and full-duplex operation.

11. (New) The bus module as claimed in claim 2, wherein the unit connecting device includes a microcontroller connected to the coupling element and drives the serial optical interface.

12. (New) The bus module as claimed in claim 2, wherein the serial optical interface includes a UART interface.

13. (New) The load feeder apparatus as claimed in claim 8, wherein the serial optical interface includes a UART interface.

14. (New) The load feeder apparatus as claimed in claim 8, wherein the optical interface enables at least one of half-duplex and full-duplex operation.

15. (New) The load feeder apparatus as claimed in claim 9, wherein the optical interface enables at least one of half-duplex and full-duplex operation.

16. (New) A load feeder apparatus for coupling to a backplane bus, comprising:

interface means for communicating with a bus module, the interface means including a serial optical interface; and

control means for controlling the serial optical interface.

17. (New) The load feeder apparatus as claimed in claim 16, wherein the serial optical interface includes a UART interface.

18. (New) The load feeder apparatus as claimed in claim 16, wherein the optical interface enables at least one of half-duplex and full-duplex operation.